EX PARTE OR LATE FILED

Ex Parte Presentation
PR Docket No. 92-235

June 24, 1997

BY HAND

Daniel Phythyon
Acting Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, DC 20554

Re: LMCC's "Consensus" Plan

Dear Mr. Phythyon:

Hewlett-Packard Company ("HP") and SpaceLabs Medical, Inc. ("SpaceLabs") hereby respond to the "consensus" plan for low power use of the 450-470 MHz Private Land Mobile Radio ("PLMR") band that was submitted in this proceeding by the Land Mobile Communications Council ("LMCC") on June 4, 1997.

A. OVERVIEW: LMCC'S PLAN WOULD FORCE THE SHUT DOWN OF CRITICAL CARE MEDICAL TELEMETRY SYSTEMS.

In simple terms, LMCC's plan would force many hospitals nationwide to shut down systems that monitor the cardiac and other vitals functions of ambulatory, but seriously ill, cardiac patients. If unable to perform such monitoring, physicians would have no practical alternative to keeping their cardiac patients confined to their hospital beds for a longer period, without being able to monitor their cardiac status during the critical time when they are beginning to walk and become physically active.

Not only would the length and cost of the patients' hospital stays increase, but a key tool in assuring a successful and timely recovery for cardiac patients would become unavailable. Moreover, millions of dollars of public and private hospital investment in critical-care telemetry monitoring systems would be lost. It should be self-evident that these results would be contrary to the public interest.

B. LMCC'S PLAN FAILS TO ADDRESS THE NEEDS OF MEDICAL TELEMETRY.

LMCC has submitted a plan that, by its own description of "target markets," is intended to meet the needs of its frequency coordinators' constituents. Despite expressed concern for the very low power requirements of critical care medical technologies, LMCC has not designated a single channel that is limited to very low power operations. Instead, it has redefined "low-power" to include even more powerful transmitter than in the past. While LMCC suggests that critical care medical telemetry operations might be able to use some of the spectrum that it has allocated for other "low power" uses, LMCC offers no serious analysis of the usability of these frequencies in the potential interference environment that would be created or of the

effect of its plan on existing medical telemetry use. With respect to the latter point, LMCC does not even have the current information on deployment of existing medical telemetry systems that it would need to make such an analysis.

LMCC's plan would replace the 267 offset channels that have been available for medical telemetry operations and other low power users in the Business Radio Service, plus low power offsets that were available in other services,[1] with 80 low power channels and 100 "mid-power" channels available to users in all services in the consolidated Industrial/Business Pool.[2] Only a limited number of these new channels are likely to be usable by critical care telemetry.

In addition, most of the LMCC-proposed channels do not coincide with the former low-power offset channels presently used for critical-care telemetry. LMCC would have hospitals undertake a massive effort of re-crystaling and testing thousands of transmitters. Even if hospitals could afford to undertake this effort for fewer usable channels than they have now, the effort could not be completed within the seven-month period specified in the Commission's Second Report and Order.

More particularly, there are severe problems with the channels that the LMCC proposes for low-power, as set forth below:

1. The "Mid-Power"(5 Watt Mobile, 20 Watt Base Stations In Designated Urban Areas, No Limits Outside These Areas) Could Not Be Used For Medical Telemetry.

The 50 channel pairs (100 channels) on which LMCC would permit 5-watt mobile and 20-watt base stations in designated urban areas[3] would create interference for UHF critical-care telemetry systems (which operate at less than 5 mW) over such great distances as to make most of these channels effectively unusable for telemetry.[4] Rather than crafting a solution that accommodates very low-power operations (*e.g.*, less than 120 mW), the LMCC plan essentially would eliminate existing low-power (<2W)

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[1] Some of these channels, of course, are not usable at particular locations due to interference, even under the pre-refarming channelization plan.

[2] Channels that are 6.25 kHz adjacent to the designated low power channels practically could serve no more than a guardband function, among other reasons, because of their proximity to much higher powered operations only 6.25 kHz away.

In addition, the frequencies near airports mentioned by LMCC that are permitted for medical telemetry use are not limited to low power operations and, therefore, are not likely to be usable by hospitals.

[3] There would be no power restriction on these channels outside urban areas under LMCC's proposal.

[4] The same problems would render the 14 channel pairs (28 channels) recommended to be subject to this limitation in the Public Safety Pool unusable for medical telemetry, as would be the case with respect to all other offsets in the Public Safety Pool where it would appear that no power limitation would apply.

channels to make even more channels available for high-power operations, which are incompatible with very low-power critical care telemetry.

2. Interference Can Also Be Anticipated On Many Of The Channels On Which 2 Watt Limits Would Be Maintained.

The other 80 former offset channels (40 channel pairs) on which 2 watt limits would be maintained might be usable in particular locations, depending upon the geographic separation between the 2 watt units and hospital locations and other propagation factors that would have to be considered on a case by case basis. If the interference environment is no worse than currently exists on the former Business Radio offsets, this could mean that at any particular location, perhaps two-thirds (50-55) of the individual channels might be usable, which is well below what is necessary to serve existing hospital requirements at many locations.

There is a strong likelihood, moreover, that by grouping "low power" (<2w) users from all services into a limited number of channels, the majority of which would be assigned for itinerant use, the chances of interference to very low power operations on those channels (plus potential interference from higher powered signals with 12.5 kHz separations) will be much greater than critical-care telemetry has experienced in the past. Even if the interference on these channels is intermittent, depending upon their variable use by itinerant workers, hospital requirements for reliable continuous cardiac monitoring would preclude the use of these channels in many locations.

3. The Few Channels Most Likely To Be Usable For Medical Telemetry Would Also Require That Existing Units Be Recrystaled To Employ Them.

The twenty (20) channels that are specified for coordinated non-voice communications seem most likely to be usable for medical telemetry, are channels formerly assigned to the former Manufacturers Radio Service. We understand that these frequencies are already employed by manufacturers for crane operations and robotic functions, so that existing such units would not require change.[5] That may be helpful for manufacturers, but hospitals could not use these frequencies without changing crystals and re-testing their existing units — a costly and time-consuming process — and even then they would not be assured the ability to use their telemetry units without experiencing destructive interference.

C. IT IS RECKLESS FOR LMCC TO SUGGEST THAT THE "TRANSITION PERIOD" BE ADVANCED.

LMCC essentially concedes that its plan would not accommodate even existing medical telemetry operations in the 450-470 MHz band and suggests the allocation of

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[5] The central alarm station channels also have generally not been used for medical telemetry operations.

new vacant spectrum to meet such needs. Under these circumstances, its suggestion that the period of time for which high-powered operation on channels formerly reserved for low power use should be advanced and that the seven month "transition period" should start as of the date of its filing can only be described as reckless.[6]

D. CONCLUSION: IT IS MORE EVIDENT THAN EVER THAT THE COMMISSION MUST INJECT ITSELF DIRECTLY INTO THE DECISION MAKING PROCESS.

We have previously urged the Commission that the decisions that need to be made regarding low power operations in the 450-470 MHz band cannot be left to the coordinators and that the Commission must involve itself more directly in resolving the issues. Unfortunately, nothing makes this point more clearly than LMCC's submission itself.

Respectfully submitted,

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cc: See attached certificate of service.

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[6] Further, any request by LMCC to shorten the "transition period" should have been raised in the form of a petition for reconsideration of the Commission's Second Report and and Order in this proceeding.

CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing letter to David Phythyon, Acting Chief, Wireless Telecommunication Bureau were sent by hand and first-class mail, postage prepaid, this 24th day of June, 1997, to each of the following:

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